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Streets, Parks and Houses: A Pedestrian Neighborhood

Transforming Phalen Village into a pedestrian-oriented community by reconnecting to transit, ecology and neighborhood

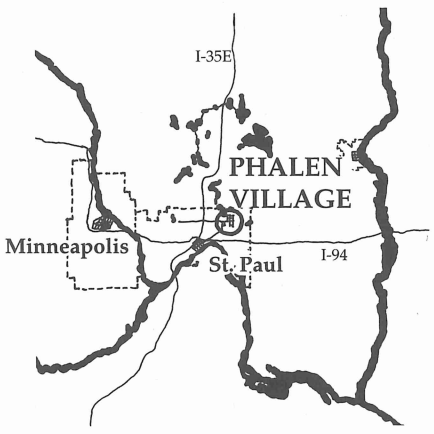


Figure 1. Location of Phalen Village.

Phalen Village is located approximately three miles northeast of downtown Saint Paul, just southeast of Lake Phalen and east of Johnson Parkway. The Phalen community is surrounded by green parks, schools and tree-lined residential blocks, but the center of the neighborhood is marked by large expanses of empty pavement, superblocks of walk-up apartments and automobile-oriented strip malls.

Phalen Village is at a crossroads. Declining or stagnant property values, increasing poverty and crime, and a rapidly changing population have created serious problems. These problems are still limited to a small core area, however. The public parks, greenways, institutions, and traditional neighborhoods around the core provide a strong base on which to rebuild the community.

This case study shows how Phalen Village can integrate new streets, parks and houses to create a safe, convenient and pedestrian-oriented neighborhood. It proposes three major physical interventions:

(1) creating a **wetland park** which reconnects the neighborhood to its ecological structure and creates a neighborhood signature.
(2) building a neighborhood **transit node and commercial niche** which attracts new development and balances the needs of people, transit and cars.
(3) inserting **distinct neighborhood streets** which act as armatures to focus the rehabilitation of existing apartments and the development of diverse new housing types.

Background

The principles and design guidelines in this case study were developed in close cooperation with the following organizations: the Phalen neighborhood[1], the City of Saint Paul Department of Planning and Economic Development[2], the Minnesota Department of Natural Resources[3], the Department of Landscape Architecture[4], the Design Center for American Urban Landscape[5], and the Department of Architecture[6]. The work is a detailed application of the pedestrian pocket concept explored earlier in this LCMR grant and reported in "Filling In: Transit and Landuse Urban Design Strategies to Enhance Environmental Quality," CALA Working Papers, Vol. 1, No. 1.

The basic principles and components of a transit- and pedestrian-oriented neighborhood are; (1) create an "imageable" station stop, (2) integrate it with a compact, mixed-use commercial core, (3) increase density and diversity of housing within a ten minute walk, and (4) carefully design the public open space system of streets, sidewalks, parks, and squares with pedestrian and bike emphasis.

One of the most useful working hypotheses which has informed this research effort is a new way of thinking about the public space in a neighborhood. All too often the public space in a neighborhood is what is "left over" after the development of private property. This case study reversed the question and asked "what kind of public space should the neighborhood have to be a wonderful place to live?" The question led to the idea of creating distinctive public places (special streets and/or parks) with specific design criteria and guidelines to revitalize old or attract new development. To reflect this heightened emphasis on the public realm as a designed entity, the new streets and/or parks have been called public "armatures." With this concept a community can invest in the development of these armatures over a long period of time in order to create a distinctive image for the neighborhood it wants as a whole.

For the purpose of this case study the research team has developed specific design principles for the major public armatures proposed and shown specific building types which are consistent with the design principles. However, the case study is not intended to be "the" final plan. It is "a" plan, "on paper only," which demonstrates how a neighborhood can develop a transit- and pedestrian-oriented urban design framework with its own special identity.

This case study report is organized under the following major headings:

- **Phalen Village in the Larger Landscape**
- **Connecting to An Ecological Structure**
- **Balancing People, Buses and Cars**
- **Houses and Streets**
- **Phalen Village: Designing for the Whole**

Phalen area looking west toward downtown Saint Paul. DCAUL

[1] The Phalen Village Small Area Plan Task Force has been working since 1991 with the Saint Paul Department of Planning and Economic Development (PED) to produce a Small Area Plan as part of Saint Paul's Comprehensive Plan. The research team worked closely with this community group in developing the case study.

[2] The Saint Paul Department of Planning and Economic Development (PED) has provided the Small Area Plan Task Force with staff assistance and is drafting the final Phalen Village Small Area Plan.

[3] The Minnesota Department of Natural Resources (DNR) has been working with Professor Joan Nassauer and graduate students in the Department of Landscape Architecture (LA) at CALA on the feasibility of "daylighting" the storm water system in the Ramsey-Washington Metro Watershed District as a means of reducing flooding and increasing water quality while providing ecological habitat. The DNR and Nassauer have secured a major grant from The McKnight Foundation to explore the feasibility in more depth.

[4] See 3 above.

[5] CALA's Design Center for American Urban Landscape has relied on the work of Nassauer, the Phalen Village Small Area Plan Task Force, and the work of this case study in a larger analysis of how the hidden resources of Phalen Creek and Trout Brook could be reclaimed and made an ecological focus for redevelopment and an expansion of the Saint Paul park system.

[6] The Department of Architecture in CALA conducted a design studio (ARCH 5121/8254) in the Fall of 1992 led by Dean Harrison Fraker and Cass Gilbert Visiting Professor Daniel Solomon which explored how to rehabilitate existing housing and provide new housing which re-created a sense of community - how houses add up to neighborhood.

Phalen Village in the Larger Landscape

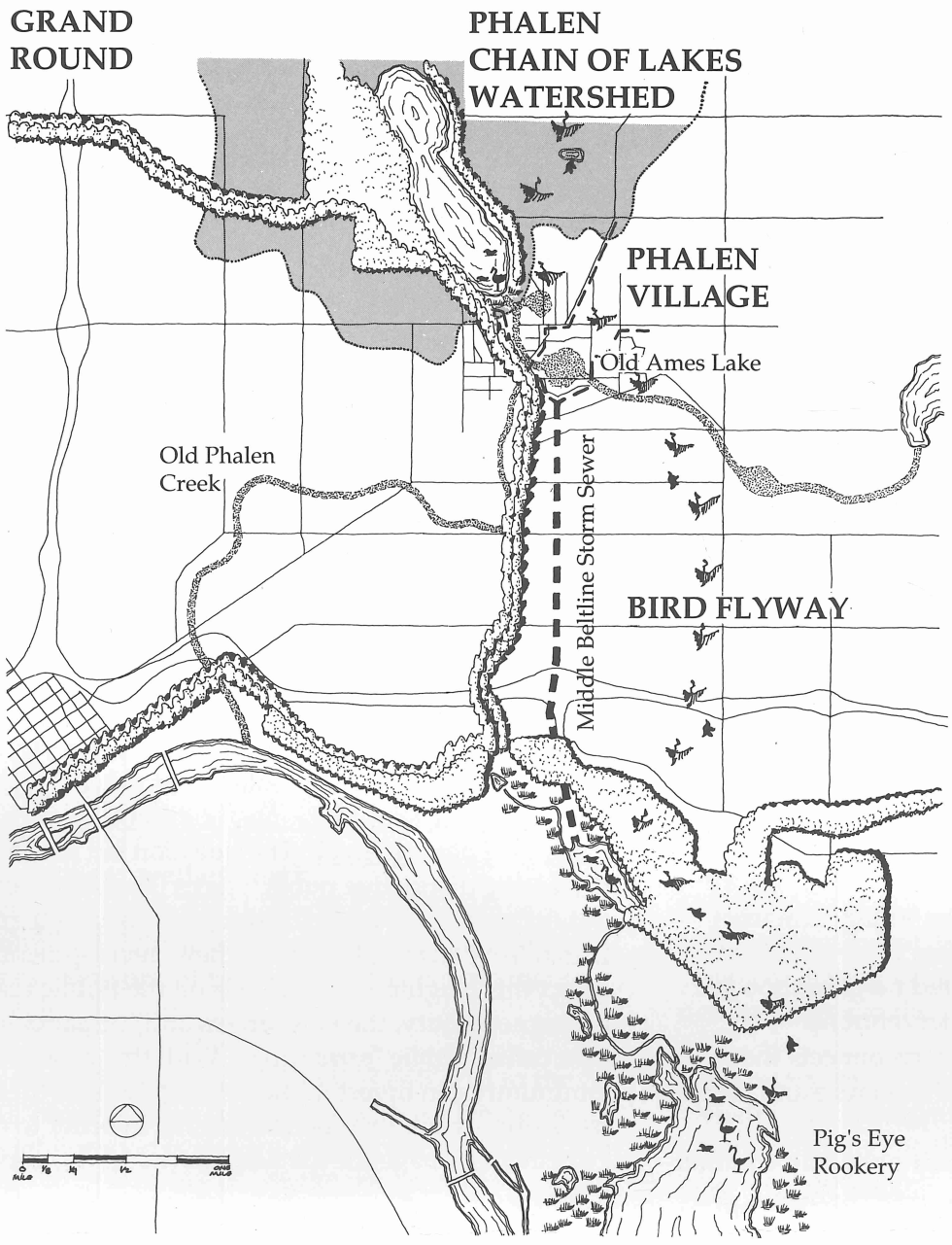


Figure 2. Phalen Chain of Lakes Watershed, Bird Flyway and the Grand Round of Saint Paul.

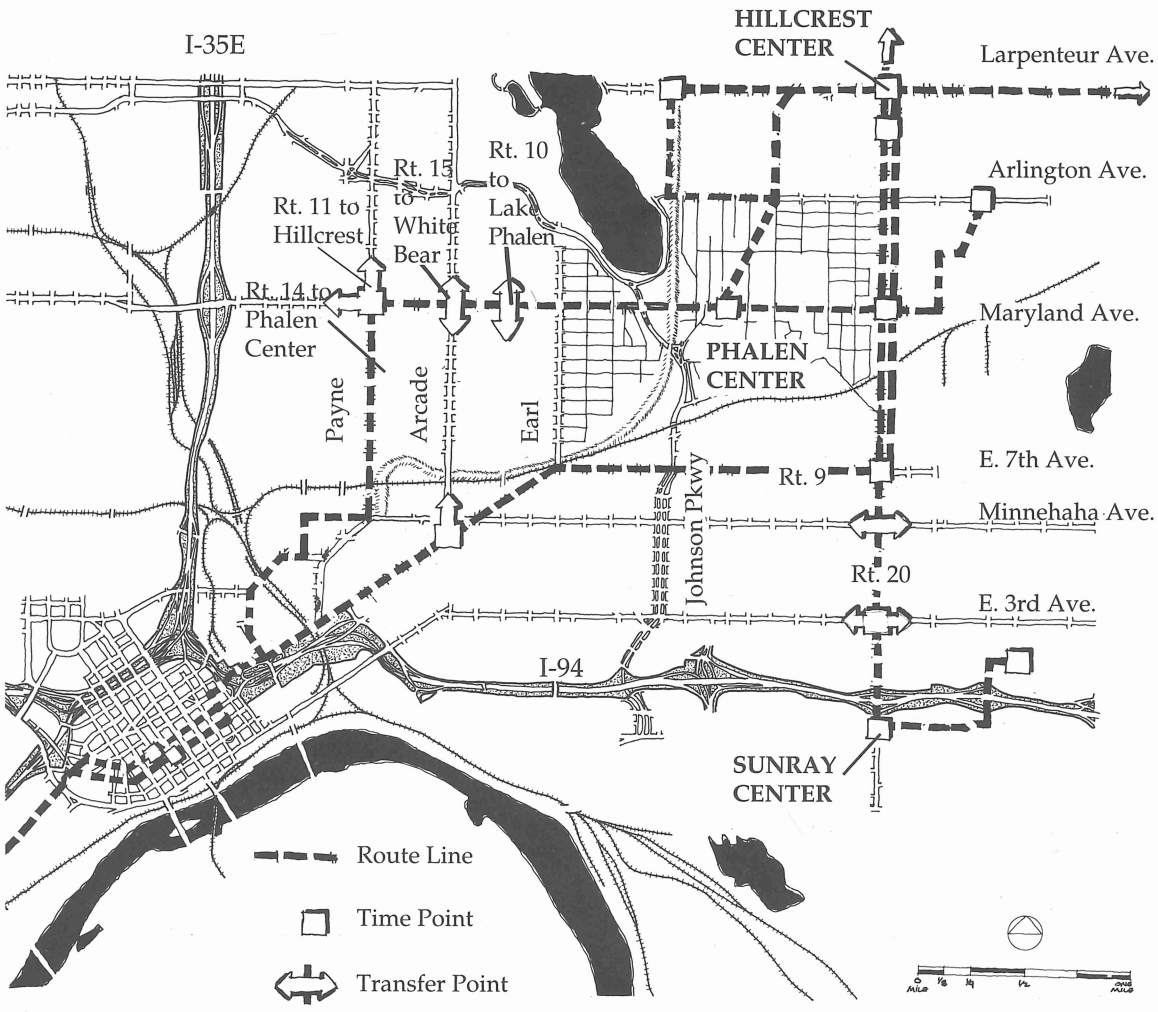


Figure 3. Transportation Connections.

Knowing how Phalen Village is connected to its surroundings is an important step in developing a vision for its future. These two pages illustrate several important ways in which the neighborhood fits in to its surroundings. These connections, if developed, can form the basis of a neighborhood identity and direct improvements and investments in the community.

Ecological Place

Several environmental features converge at Phalen Village. These natural amenities offer the potential to create a strong community identity, linking it to its ecological and environmental structure.

The entire Phalen Chain of Lakes Watershed drains into Lake Phalen. Before it was put into the Middle Beltline Tunnel storm sewer, the outfall from Lake Phalen flowed into Phalen Creek and south to the Mississippi. Ames Lake and its creek formed a tributary which flowed through the Phalen neighborhood and into Phalen Creek (see page 4). These natural drainage systems have been filled in and replaced with drainage pipes over time, masking the neighborhood's original drainage structure.

Egrets and herons roosting in the Pig's Eye Rookery to the south use the chain of lakes as a daily feeding corridor, fishing the shallows of each lake as they proceed northward. The filling in of Ames Lake and its creek have interrupted this natural corridor, reducing the food supply for these birds and causing them to pass over the neighborhood.

Lake Phalen Regional Park and its extension to the south, Johnson Parkway, run through the study area and form a part of Saint Paul's "Grand Round" park system. The Grand Round has proven to be one of the great legacies of Saint Paul urban planning, celebrating the memorable image of the city's natural amenities through a connected system of parks and parkways. The strong property values along the Grand Round are a testament to its continuing appeal as a development strategy. Unfortunately, the Phalen Village neighborhood has been cut off from this amenity by the former Burlington Northern Railroad berm and an automobile-oriented shopping center with its large parking area constructed on fill over the former Ames Lake.

Transportation Connections

Phalen Village is only three miles from downtown, but transit connections show the relative inaccessability of the area from downtown St. Paul by transit. While Maryland Avenue, East 7th Street, Minnehaha Avenue and Johnson Parkway all provide reasonably direct automobile access to Phalen Village by car, these roads are frequently crowded at rush hour.

Maryland Avenue and Johnson Parkway carry more than 20,000 cars per day through the neighborhood, but most major roads are diverted around the study area. The lack of a direct route to downtown St. Paul or north to Maplewood Mall makes the area seem farther than three miles from each.

Bus service consists of a single route (#14) which splits at the intersection of Maryland Avenue and Prosperity Road. This is a local route, requiring 22-25 minutes for a trip downtown.

Railroad corridors have historically served as strong boundaries for the area, blocking views toward Lake Phalen and south on Johnson Parkway. However, the recently vacated Burlington-Northern berm provides an opportunity to create "parkway" connections to downtown and the larger park system. Local streets are irregularly shaped and unconnected to the surrounding neighborhoods.

Public Open Space and Property Pattern

Figure 4 shows major public open spaces and property ownership lines around Phalen Village, revealing the atypical nature of the central area. Parks and schools are distributed around the edges of the neighborhood, as a series of autonomous public places. Johnson Parkway and Lake Phalen Regional Park serve as major amenities and open spaces for a much larger area of the city, but are largely cut off from Phalen Village by the Burlington-Northern Railway berm proceeding northward through the area.

In neighborhoods surrounding the study area, houses facing the street provide natural observation of the public realm and increase safety. The houses are united by shady tree canopies lining the roads and sidewalks, which create a pedestrian realm connecting the houses to parks and stores.

This pattern contrasts sharply with the huge blocks, discontinuous streets and large parcel sizes at the center. The housing in this area tends to face large parking lots and ignore the few public streets. The large parcel at the center is occupied by an automobile-oriented strip shopping mall with a large parking lot between its stores and the majority of neighborhood residents. The discontinuous streets, large scale parking lots and lack of "eyes on the street" lead to unsupervised spaces which can allow crime to occur unobserved, and create a feeling of separation and boundary by denying the pedestrian a comfortable, safe place to walk within the center.

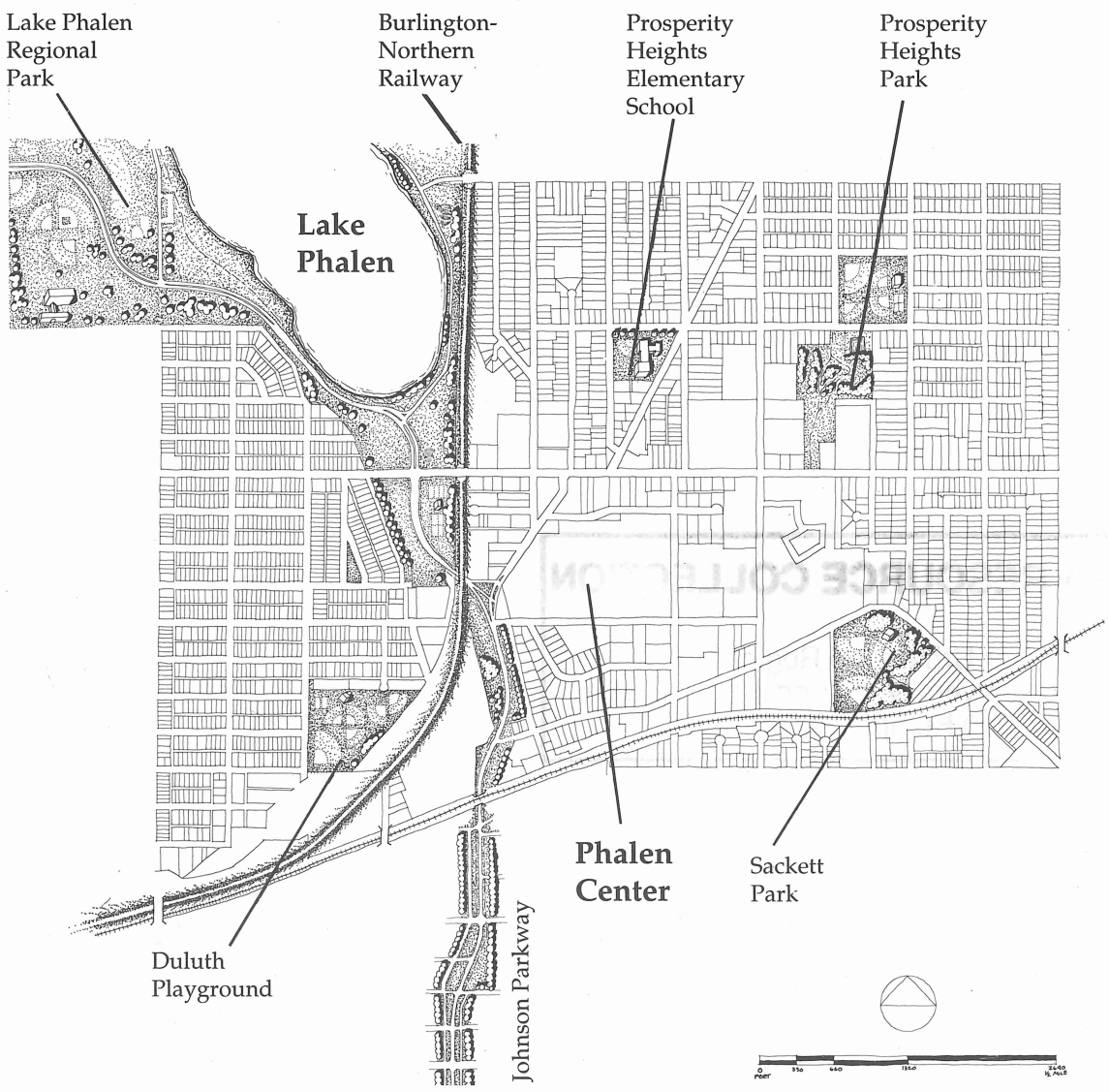


Figure 4. Existing Public Open Space and Property Ownership Pattern.

Summary of Physical Interventions

In response to the problems and opportunities described above, three major sets of physical change are proposed to revitalize the neighborhood:

(1) **Wetland Park and Public Open Space System**
Remove the automobile-oriented shopping center and reconstruct Ames Lake and its creek to create a major natural amenity (like the Grand Round) to attract new development and give the neighborhood an identity - a signature. All the existing and proposed neighborhood streets are designed to take advantage of this new asset visually and psychologically, unifying the area around a common experience. The new neighborhood park opens the neighborhood up to the larger park and recreation system of Saint Paul. It also is designed to have a stormwater cleansing function to offset expensive water treatment facilities downstream.

(2) **Transit Node and Neighborhood Commercial**
Construct an improved transportation connection to downtown, a new transit node at the corner of Maryland Avenue and Phalen Boulevard, and a neighborhood commercial street, integrated with the transit node but focused on Maryland and taking advantage of proximity to the new wetland park. This ensemble balances the needs of transit, cars and parking while creating clearly identifiable places for pedestrians.

(3) **Houses and Neighborhood Streets**
Maximize the number of new and existing units which can take advantage of the new park, transit node, and neighborhood commercial niche. The concept is to renovate the existing 2-1/2 story apartment blocks and introduce new housing types (elderly units, duplexes and garage apartments) in the model of traditional residential streets. This means inserting new residential streets through the large parcel apartment complexes and adding the new housing types along those streets at the same scale as surrounding residences. The new network of streets ties the neighborhood together and focuses on the wetland park, providing pedestrian access for residents and visitors.

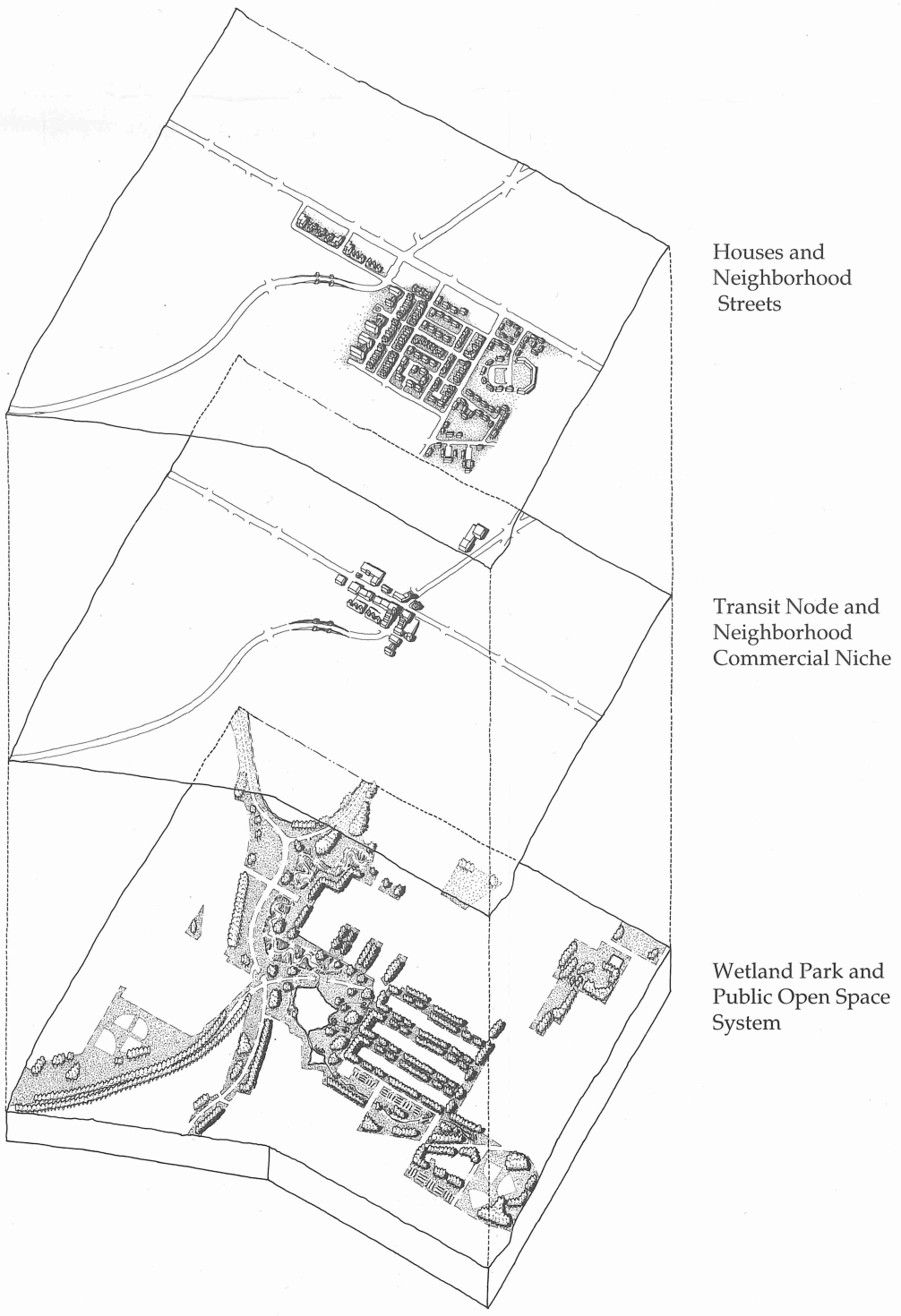


Figure 5. The three main physical interventions are separated here for clarity, but it is their interaction and connections which weave Phalen Village together into a whole.

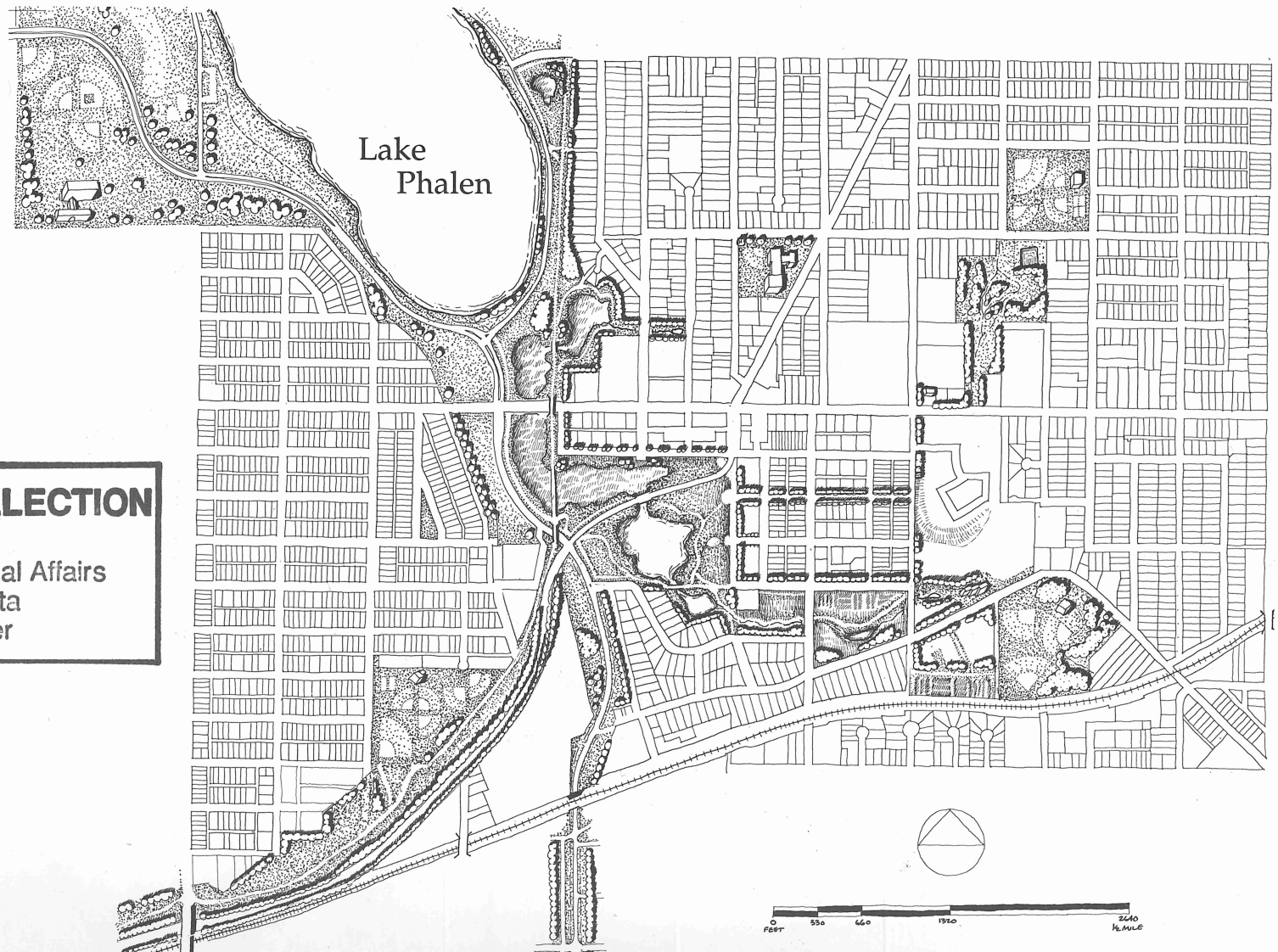
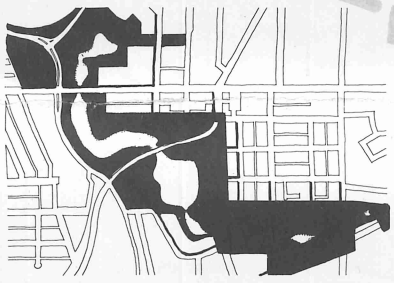


Figure 6. Wetland Park and Open Space System.



Wetland Park Location

1. Wetland Park

The first major intervention is removal of the automobile-oriented shopping center and creation of an open water and park system on the site of former Ames Lake, reconnecting the neighborhood to its ecological structure. The lake and stream follow the local watershed east toward Sackett Park. This natural water course once provided a series of pools and creeks which have since been captured by storm sewers (see figure 7). Bringing back this natural amenity to anchor the community offers a number of benefits to Phalen Village, including a strong neighborhood signature, a public open space system, enhanced land values, cleaner stormwater and natural habitat improvement.

A strong **neighborhood signature** is created by the new Ames Lake. The road through the park is deliberately kept free of any commercial development and is designed to heighten the experience of the park as an appropriate gateway to the neighborhood. Establishing the image of the wetland at the neighborhood entry allows Phalen Village to be thought of as centered on a park instead of a parking lot, highlighting an asset to attract new development.

The **public open space system** anchored by the new park ties the neighborhood together. Public and private land and buildings are organized to provide residents easy access to the park along tree-lined public streets, forming a continuous network of access for pedestrians and bike riders within the neigborhood. This network links the homes, shops and parks together as shared amenities and reinforces the neighborhood signature.

The wetland park is intended to provide **stormwater cleansing** - sediment settling in dedicated ponds and filtration by natural plant systems. This infrastructure investment partially offsets expensive treatment facilities downstream. Flooding is reduced downstream by the capacity of the wetland to store runoff during high flow events such as storms or spring melting.

Wildlife habitat in the park would become a part of the Phalen Chain of Lakes bird flyway, providing animal habitat and the opportunity for people to enjoy the habitat and wildlife.

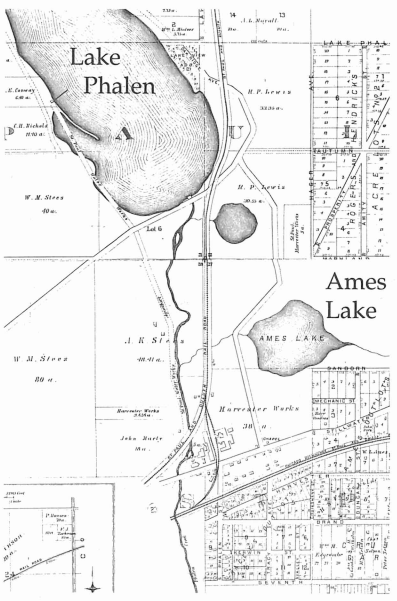
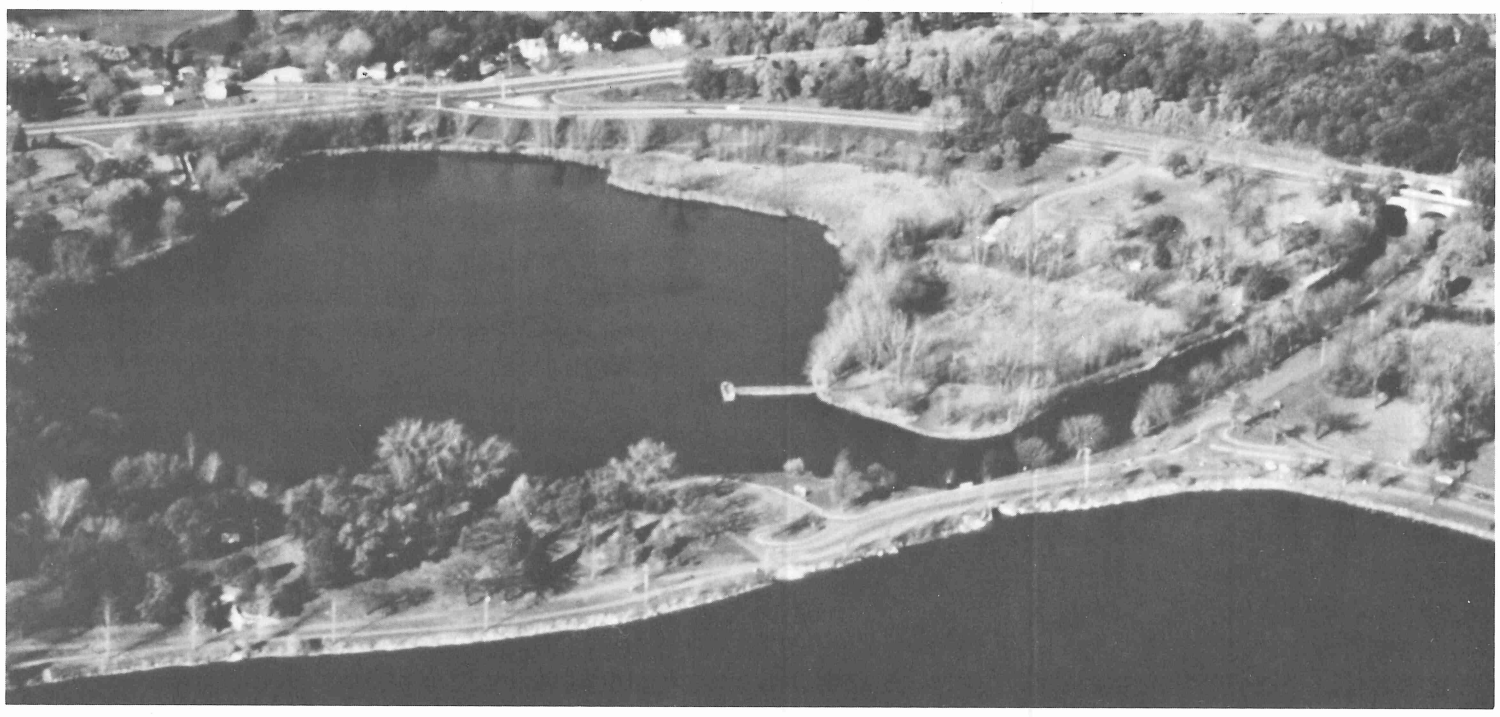


Figure 7. This 1886 map shows the original Ames Lake and its stream corridor (Lake Phalen is at upper left and Phalen Creek in the center).



Nearby Round Lake provides wetland habitat for wildlife and a popular recreation amenity for residents.

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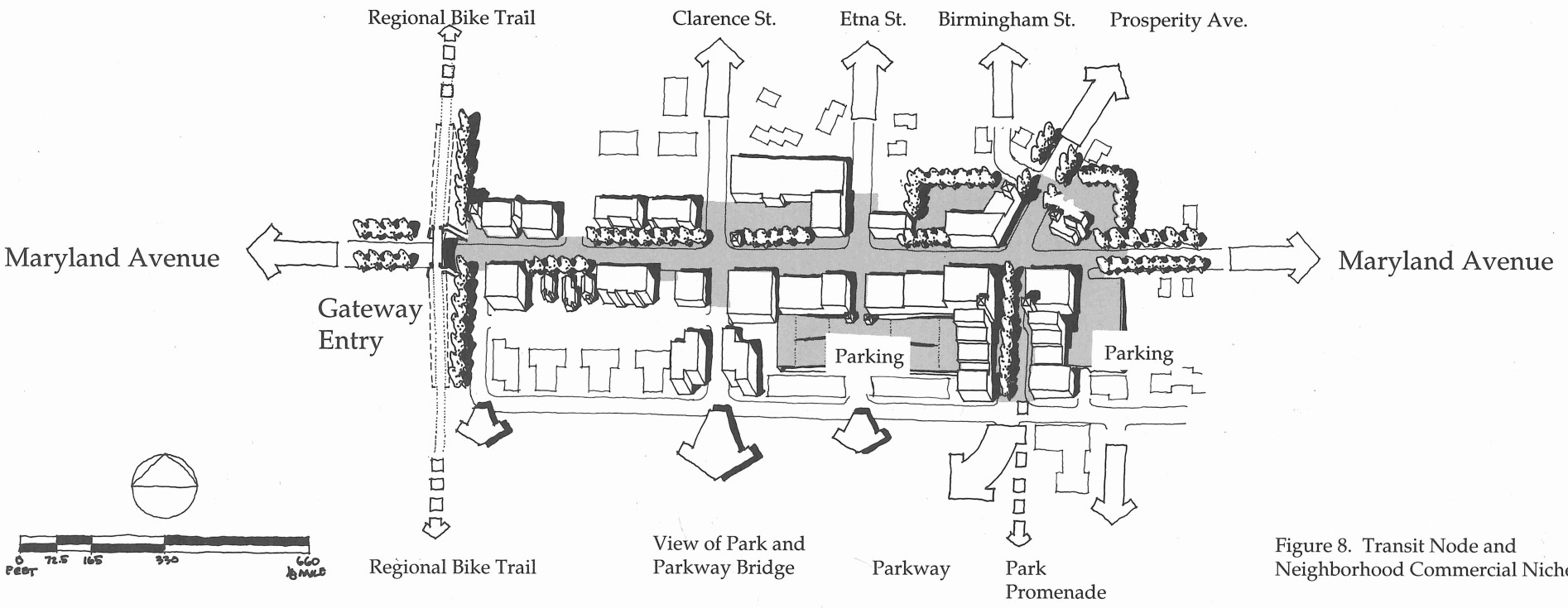
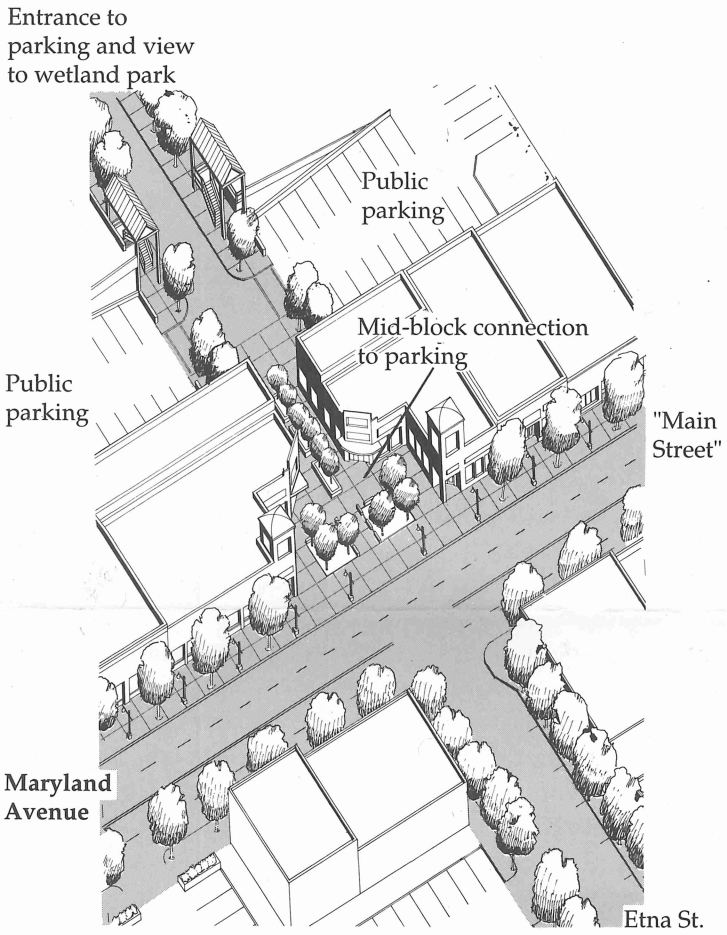


Figure 8. Transit Node and Neighborhood Commercial Niche.



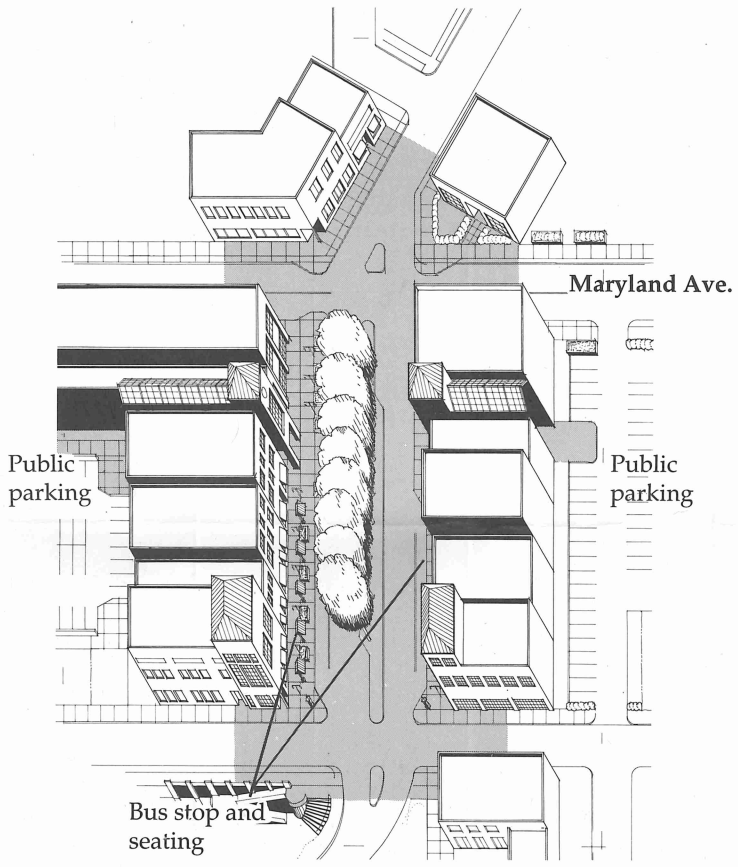


Figure 9. "**Main street** with a view' (left). The pedestrian cross axis at Etna St. links the continuous store frontage and trees of the commercial niche to the wetland park, combining a visible connection between shopping and parking, a continuation of a neighborhood street and a view to the park beyond.

Figure 10. The **transit "room"** (right) is a pedestrian space on the street with continuous store frontage, wide sidewalks, lighting, window canopies, seats for resting, bus pulloffs, tree canopy, connections to parking, and second floor business and residential uses.

2. Transit and Neighborhood Commercial

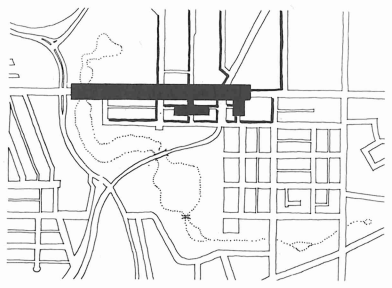
A transit node is located to serve the hundred percent corner of Maryland Avenue and Phalen Boulevard. It connects residents with the larger city by express bus to downtown and local bus routes on Maryland. The node is carefully designed to promote neighborhood commercial development on Maryland - to create a **neighborhood commercial armature.** The commercial armature is designed to be the "main street" of the neighborhood where daily retail and service needs of residents and transit riders can be found.

Figure 8 illustrates elements which are organized by the principles of the armatures. The regional bike trail bridge serves as a gateway to the neighborhood. Apartments and remnant single family houses maintain a residential presence in the neighborhood center. Continuous frontage is set up by new commercial buildings anchoring the corners of each block, and trees create a sheltered environment for pedestrians. Parking structures are located in the middle of the new commercial blocks to serve commercial and transit needs. The transit node creates a room on the street at the heart of the neighborhood where people can catch the bus and do daily errands.

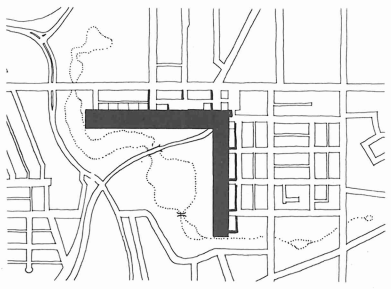
The commercial armature is designed to integrate with and take advantage of the surrounding context. The commercial and transit services are within a five minute walk of the entire neighborhood, reducing the number of car trips necessary and increasing the opportunity for exercise and neighborhood identification. The regional bike trail provides access and commercial potential for serving trail users. Neighborhood streets connecting local homes, parks and schools lead to the center, and streets from the north continue through the armature to create visual, automobile and pedestrian links to the wetland park.

Figure 9 shows a portion of the commercial "main street" on Maryland Avenue and illustrates how one of the neighborhood streets creates a pedestrian cross axis with views and access to the wetlands park. The pedestrian cross axis provides access to the midblock parking, connecting it visually to the wetland park.

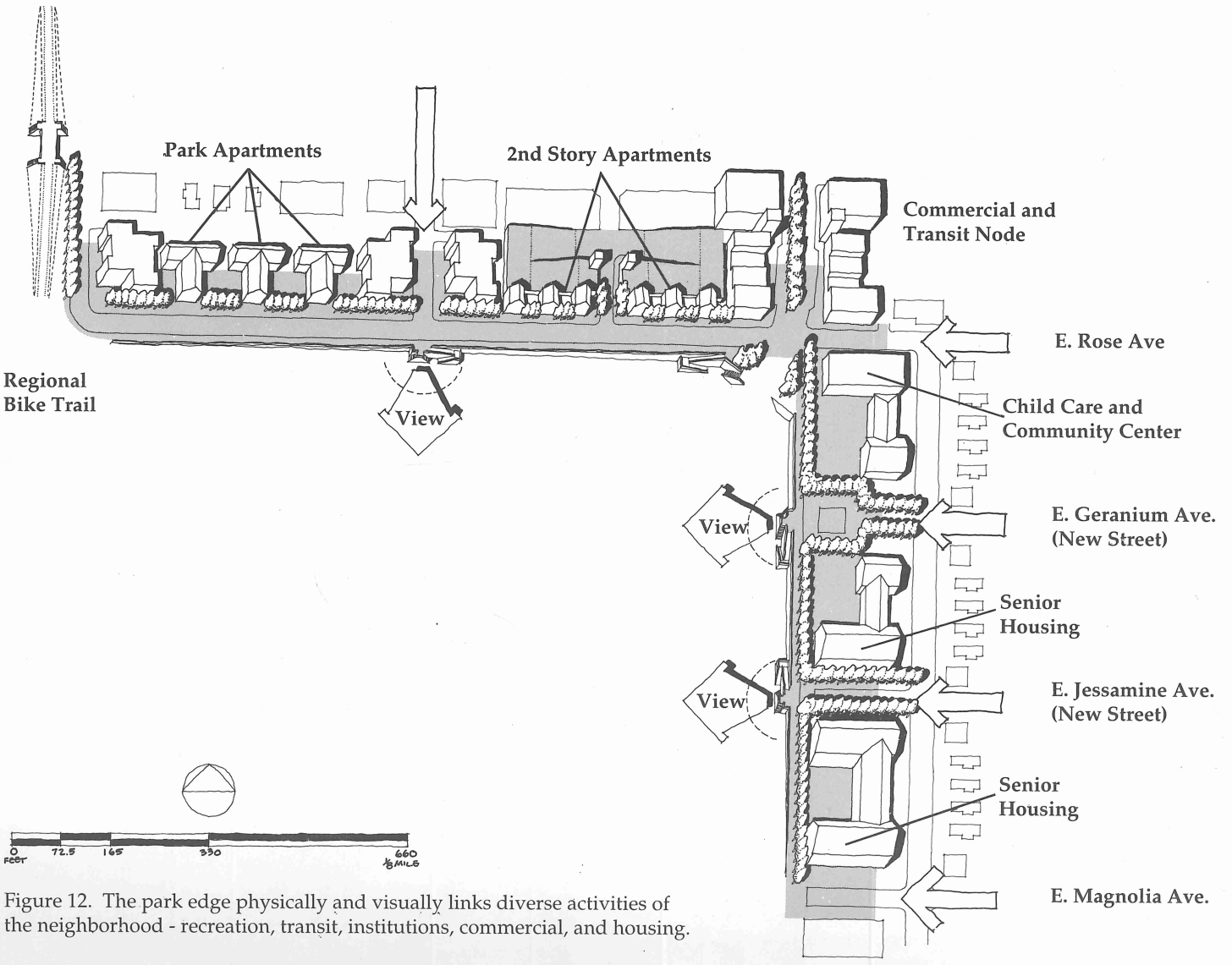
Figure 10 shows the elements which make the transit node into an outdoor room. Continuous building frontage and trees create an outdoor room at the center of the neighborhood. Bus pulloffs, shelters, lighting, wide sidewalks and plantings create a visible and comfortable place to catch the bus. Retail businesses are strengthened by the transit patrons while providing daily services. An articulated connection to the parking structure allows automobile use and preserves a pedestrian scale for the node. Second floor offices or apartments add people to the street and mass and interest to the buildings.



Commercial and Transit Location



Park Edge Location.



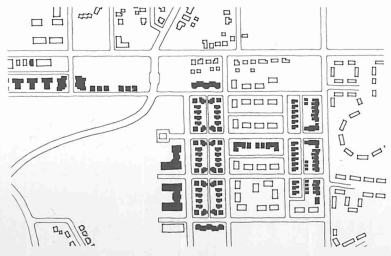


Figure 11. Proposed new housing (black) in a neighborhood residential network.

Figure 12. The park edge physically and visually links diverse activities of the neighborhood - recreation, transit, institutions, commercial, and housing.

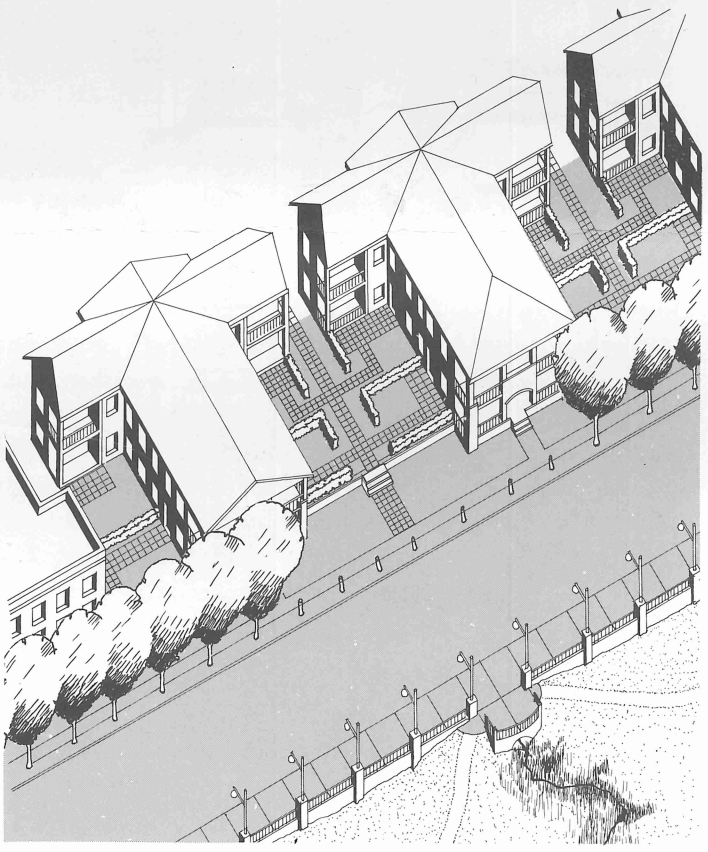


Figure 13. Park Overlook Apartments provide semi-private side yards and varied street facades.

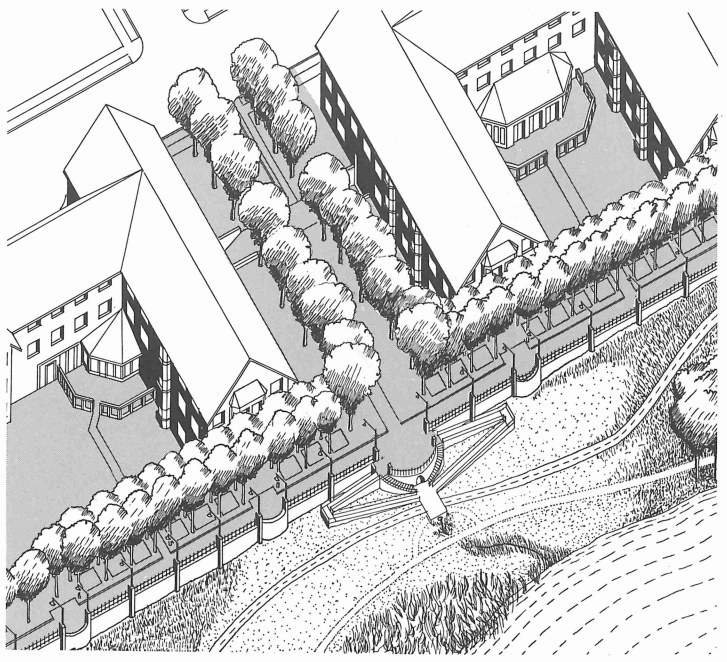


Figure 14. Senior Housing and Park Promenade create a comfortable, safe place to walk by the park.

3. A Network of Residential Streets

The proposal for residential development is based on two simple concepts. The first is to insert **"traditional" residential streets** in the large parcel apartment blocks as a strategy for rehabilitation, making them more like surrounding neighborhoods. The second is to develop **residential streets into a network** with a hierarchy which takes full advantage of the wetland park, one of the neighborhood's major physical assets and its signature. This means designing distinctly different residential streets, conceived as armatures, each with special building types and design principles which enhance its unique relationship to the wetland park and neighborhood. All of the streets and building types are organized to have a continuous presence of residential oversight, providing the safety of "eyes on the street." Figure 12 illustrates the proposed L-shaped network and identifies each of the armatures in the network. Major design principles for sample armatures are described below.

Frontage on the wetland park is intensified by two new residential armatures giving a strong frame for the L-shaped park edge. East Rose Avenue on the north is designed as a one-sided street which overlooks the park. A new north-south street, New Street, and senior housing units create a layer of semi-private courtyards and semi-public street squares unified by a pedestrian promenade. Both residential streets are designed to maintain open views and access to the park, linking all the streets of the network to the park.

Figure 13 illustrates the new apartments north of the park. Entries from Rose Avenue for the front units and from individualized side yards for the rear units provides a hierarchy of territory and varied street facades, increasing exposure to the park.

Senior housing units and the park promenade on the east (see figure 14) form a similar pattern. Units share a courtyard which opens to the tree-lined promenade. The promenade gains surveillance and activity from the presence of housing, and offers a shady path overlooking the park for strolling and resting. Special lighting, railings, seating, and trees create a unique room along this promenade.

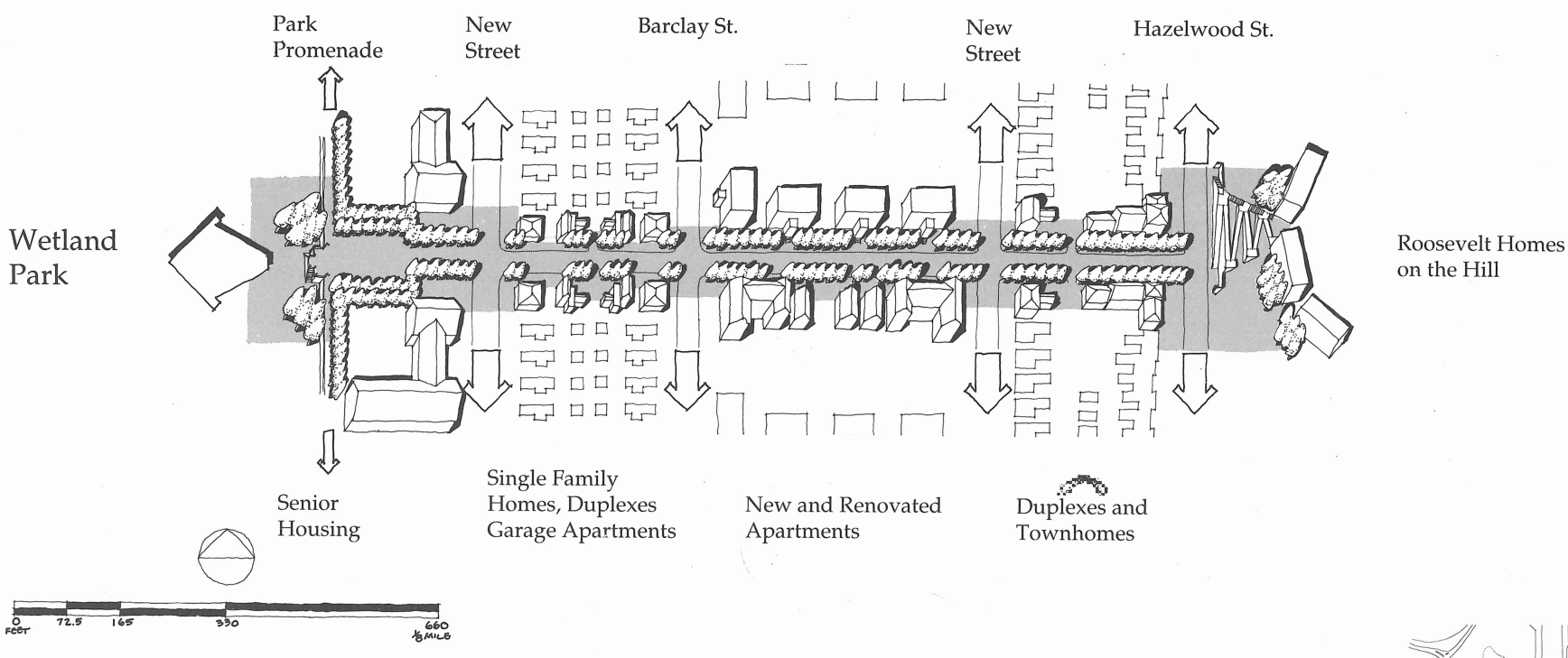
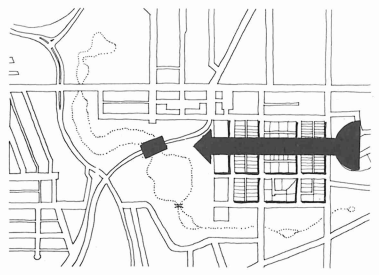


Figure 15. The Residential Boulevard.



Residential Boulevard Location.

A new **residential boulevard,** East Geranium Avenue, cuts through the existing apartment superblock to visually and physically link two of the most distinctive features of the neighborhood - the hill at Roosevelt Homes and the bridge in the park. This public pathway allows a new orientation for the apartments and provides individuals a clear connection to their neighborhood (see figure 15). The increased right-of-way width contains waterways to the wetland - ecological fingers which direct runoff down planted channels and demonstrate the connection to the neighborhood signature park.

The boulevard unites diverse housing types and connects them to the neighborhood. An entry square at the west end provides a strong anchor for the armature on the park. Large building masses signal the edge of the residential district. Senior housing, duplexes, renovated and new apartments, townhouses and public housing are brought together to share the public space of the boulevard. These different types all have front doors on the street, an orientation which links the diverse types in a common framework. At the east end the pedestrian stair/ramp provides a visual emphasis on the hill and access to Roosevelt homes.

The space between building facades on the north and south sides of the boulevard is conceived as a continuous public realm with a hierarchy of public and private functions and as a carefully designed ecological environment (see figure 16). Planting, contours, shrubs, tree canopy, sidewalks and lighting provide a safe and enjoyable pedestrian zone and an animal corridor clearly separated from the car. The ground around existing apartments is redesigned to provide semi-private yards for residents. The units themselves are re-configured from the inside out, combining small apartments to serve the larger families in this neighborhood. Fewer units reduces the parking requirements, which are provided in the rear.

The remainder of the residential network (see figure 11) has a variety of new medium-density housing types including townhouses along Hazelwood and duplexes with garage apartments on the blocks between Barclay and New Street (see figure 17). Added to diversify the types of housing available in the neighborhood, these units share the street much like existing single family homes in the area. Yards, entries facing the street and a continuous canopy cover are a few of the cues that allow this medium-density housing to fit in to the neighborhood. The garage apartments are also given a yard along the alley which becomes a small street.

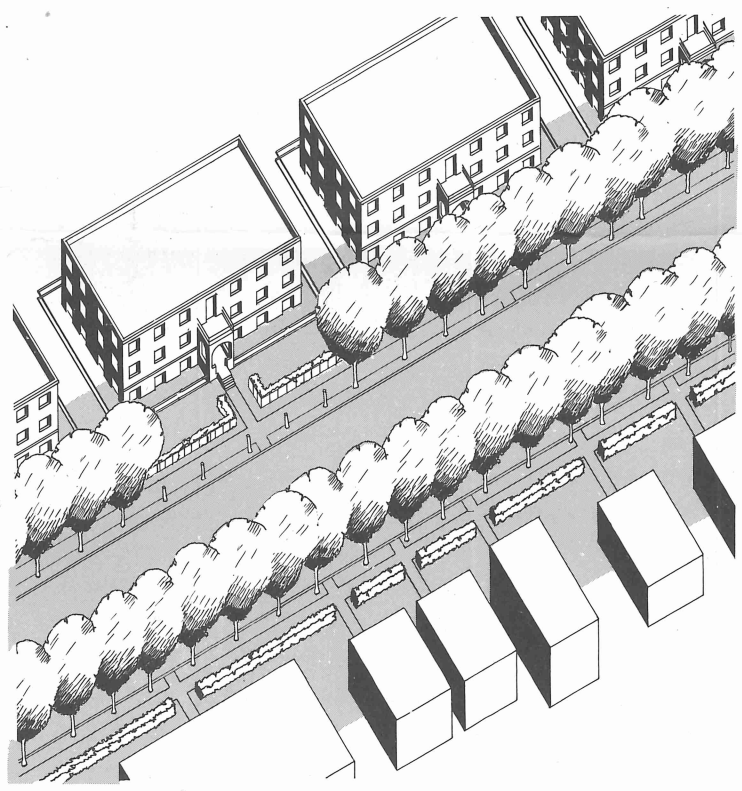


Figure 16. New and renovated housing orient toward a residential boulevard with front yards, wide sidewalks, lighting and shade trees.

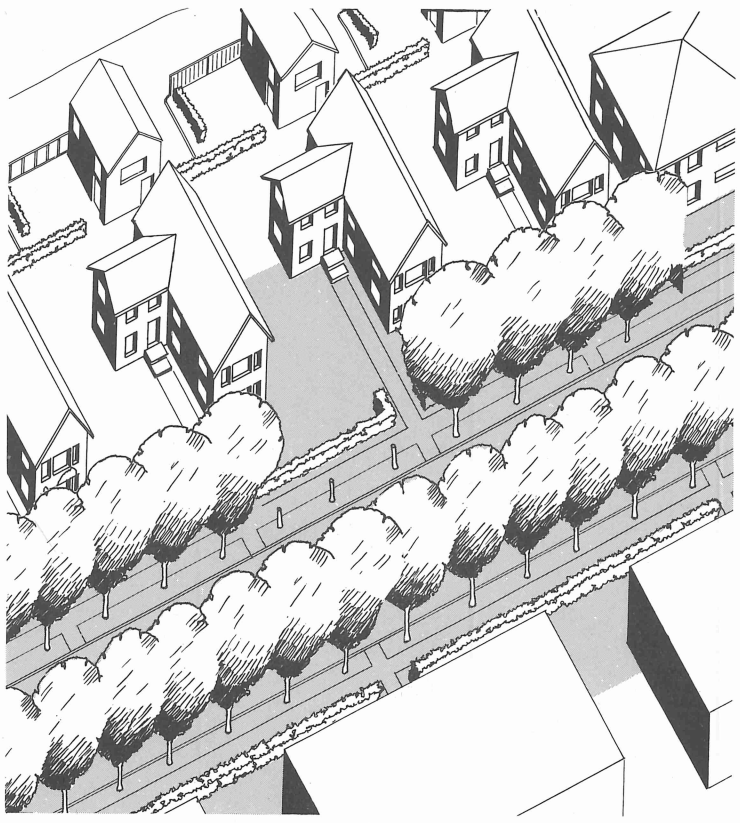
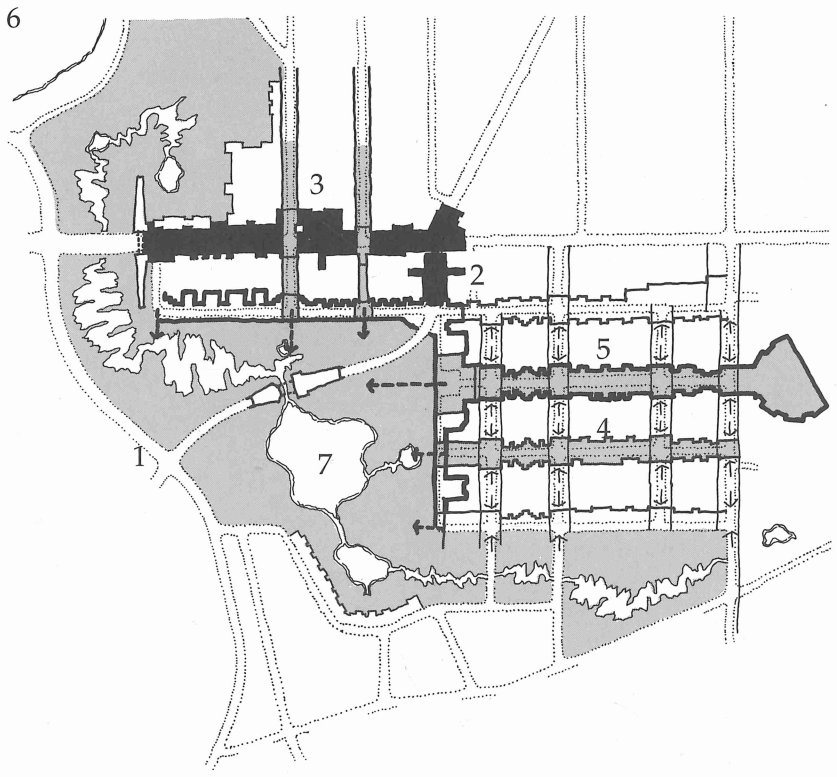


Figure 17. A diversity of housing types - single family homes, duplexes and garage apartments - are carefully designed to recall the residential fabric of nearby neighborhoods.

Phalen Village: Designing for the Whole



Neighborhood Features
1.Wetland Park
2. Transit Node
3. Commercial Niche
4. Residential Street Network
5. Residential Boulevard
6. Lake Phalen
7. New Ames Lake

Figure 18. Phalen Village Armatures and Connections.

The Phalen Village case study proposes three major physical interventions:
(1) A re-created **wetland park**,
(2) a compact, pedestrian oriented **neighborhood commercial niche** anchored by a **transit node**, and
(3) a new **network of residential streets** with increased housing density.

While each of these interventions is essential to the overall concept, their interaction with each other and the neighborhood is a more significant contribution of the plan in improving the quality of the whole.

The wetland park is a wonderful amenity by itself, but as a neighborhood signature it offers investment, recreation and living opportunities which connect residents and visitors to each other through the place. The transit node "room" and commercial "main street" have design qualities of their own, but their unique relationship to the wetland park gives them a special identity. The idea of traditional residential streets, cleverly modified to create higher density, is an important design concept, but the specific L-shaped network proposal linking neighborhood features and all residential streets to the park is even more powerful.

Each intervention has design features which link it visually and experientially to design aspects of the others, weaving the three major interventions and the neighborhood together into an integrated whole. This approach of designing a neighborhood as a multi-layered orchestration of interconnected systems - e.g. transit, ecological structure, housing, neighborhood streets and neighborhood commercial - which creates a clear identity and experience of the whole is the most important contribution of this case study.

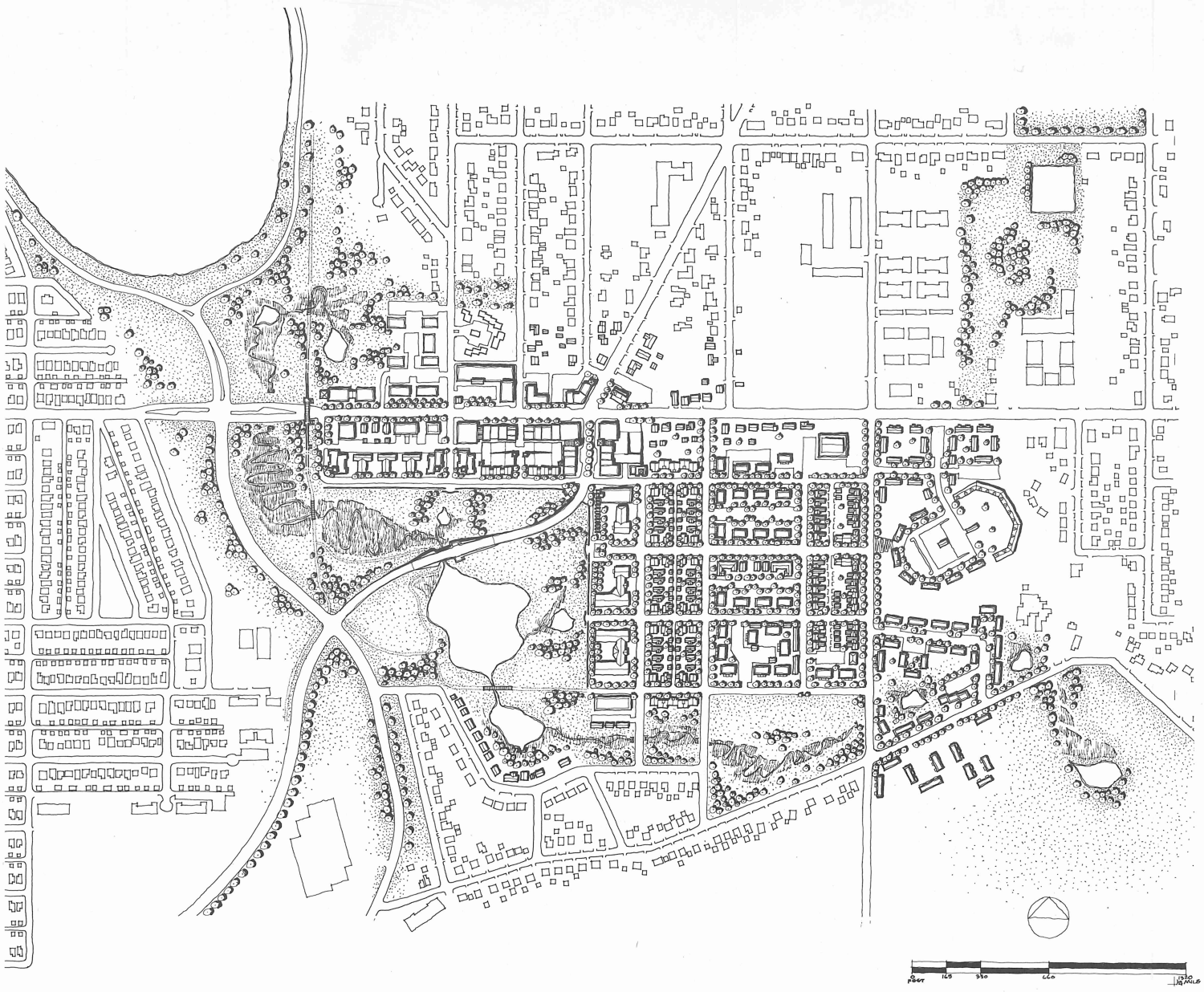


Figure 19. This Phalen Village design scenario combines a re-created wetland park, a compact neighborhood commercial niche centered on a transit node, and neighborhood streets and houses to make a pedestrian-friendly community built on the assets of the area.

Credits

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